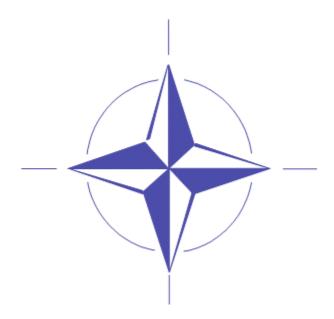






### Non Lethal Capabilities Update



NDIA Armament and Munitions Forum
Unconventional and Emerging Armaments Section

**November 13, 2013** 





# Outline

NATO Guidance for Armament Groups

**NATO NAAG Restructure** 

Terms of Reference for Non Lethal Capabilities

NATO Non Lethal Capabilities Progression

**Recent Activities** 

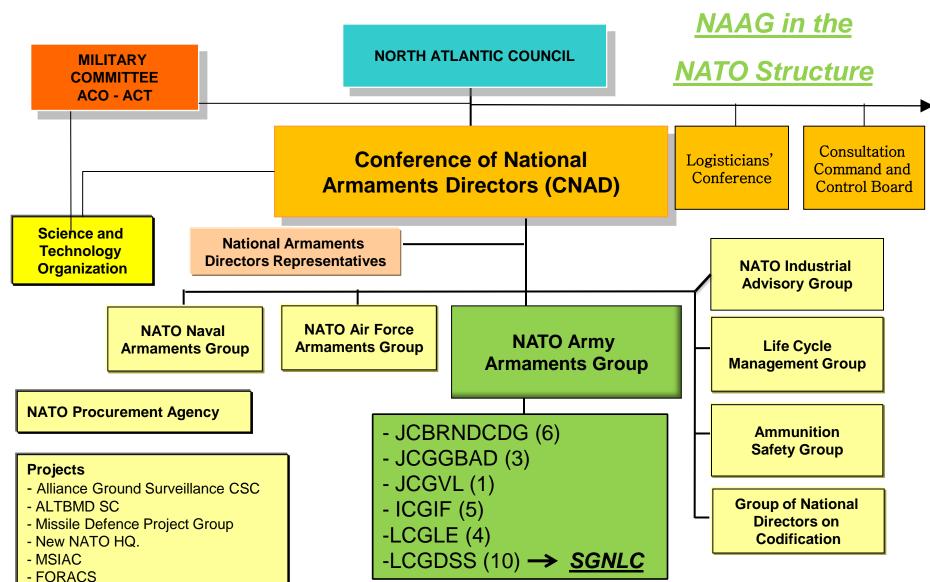


# **Mission - Main Armament Groups**

- NATO Main Armament Group's Handbook revised in 2012 and available on DI Portal
  - Foster exchange of Information
  - Promote technical Standardization, Interoperability and Integration
  - Identify and promote Technical advancements
  - Plan/direct/coord subordinate groups
  - Liaise with all relevant organizations
    - Within NATO
    - Outside EU, NGOs, Industry, etc











# Land Capability Group Dismounted Soldier Systems Sub Group on Non-Lethal Capabilities

#### **Terms of Reference**

- ❖ Focal point for all activities related to Non-Lethal Capabilities (NLC) in the NAAG.
- ❖ Responsible for NLC across the full spectrum of military operations and operating environments.
- ❖ Joint and three-service focus within Nations and CNAD.
- ❖ Supports all NATO Essential Operation Capabilities (EOC), in particular
  - ❖ "Force Protection" and
  - ❖ "Effective Engagement".





### **Near Term Objectives**

- New NATO Strategy "Smart Defense"
- Active Engagement
- Building Capability Through Multinational Approaches
- Connected Forces Initiatives
- Even more Interoperability
- Lessons from Current Operations



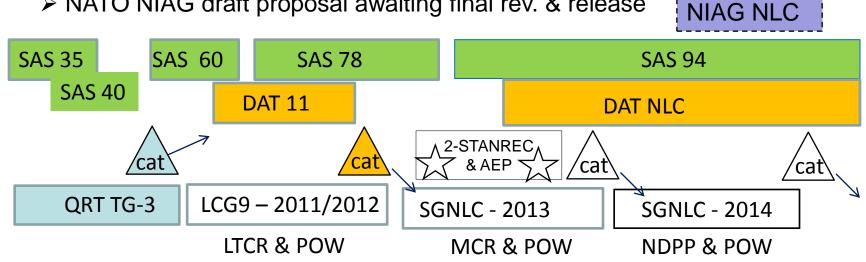


### NATO Non Lethal Capabilities Progression

➤ NATO Non Lethal Capabilities initiated under a Quick Reaction Team transitioned to Topical Group 3

#### ➤ NATO supports

- ➤ NATO's Research & Organization (RTO), Systems Analysis & Studies Panel support to develop common, interoperability and standardization addressing Non Lethal Capabilities
- ➤ NATO's Emerging Security Concerns (ESC) Defense Against Terrorism initiates DAT 11 on Non Lethal Capabilities with focus on TRL 7-9 for ISAF
- > NATO NIAG draft proposal awaiting final rev. & release



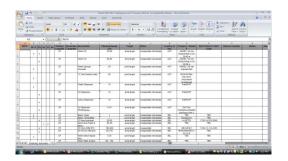


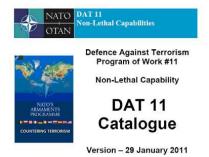




### NLC Interoperability Recent Activities

#### Non Lethal Catalogue





DRAFT

High TRL 7-9 for ISAF

STANREC 4729 & AEP 74
Performance of Non-Lethal
Land vehicle Arresting Device



Captured vehicle (by vehicle arresting net)

NATO Multi National Approach
Tier II effort highlight

### STANREC 4744 & AEP 94 Non Lethal Kinetic Energy Methodology

- Blunt Trauma Experts
  - SubGroup 1 Skin Penetration
- SubGroup 2 Head Impact
- SubGroup 3 Chest Impact
- SubGroup 4 Abdomen Impact
- SubGroup 5 Accuracy
  - Leveraging
  - US JNLWD Advanced Total Body Model



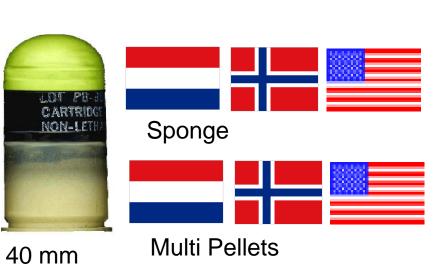
 Additional Experts from Soldier CCIEP Group





### Examples of Non Lethal Multi National Approaches









Long Range Acoustic Device





# Non Lethal Capabilities

### THANKS FOR YOUR ATTENTION!





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